

# UNITED STATES DEPARTMENT OF COMMERCE

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Patent and Trademark Office
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7001635.	COMMISSIONER OF FATERITS AND TRADEMI
	Washington, D.C. 20231

APPLICATION NO.	FILING DATE	<u> </u>	FIRST NAMED INVENTOR		ATTO	ORNEY DOCKET NO.
09/441,619	11/16/99	CHEN		VJ	TI-	29646
— 023494		MMC***	2/1025		EXA	MINER
EXAS INSTRU	MENTS INCOF			CHOE,	H	
° 0 BOX 6554	74, M/S 399	99		ART U	NIT	PAPER NUMBER
DALLAS TX 75:	265			2817		$\mathcal{A}$
				DATE MAII		/25/00

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 



# UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

#### NOTICE OF ALLOWANCE AND ISSUE FEE DUE

023894 MMC2/1025 TEXAS INSTRUMENTS INCORPORATED F 0 BCX 685474, M/G 3999 OALLAS TX 75265

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNI	т /	DATE MAILED
09/441,619	11/16/99	020	CHUE, H	2817	10/25/00
irst Named CHEN,	.,	35 US	C (54(b) term ext. =	0 Days	· n

INTERIOR SULATION SCHEME FOR FILTERLESS SWITCHING AMPLIFIERS

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ATTY'S DOCKET NO.	CLASS SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
2 TI- 29646	230-010.0	000 U22	UTILITY	NO	\$1240.00	01/25/01

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

#### HOW TO RESPOND TO THIS NOTICE:

- I. Review the SMALL ENTITY status shown above.
  If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:
  - A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
  - B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.
- II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give application number and batch number.

  Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

patent and trademark office copy

Notice	of a	Allow	ability
Notice	OT A	Allow	ability

Application No.

Applicant(s)

09/441,619

Chen et al.

Examiner

**Henry Choe** 

Group Art Unit 2817



All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.					
[X] This communication is responsive tothe application file:	d on 11/16/99				
X The allowed claim(s) is/are 1-20					
The drawings filed on are acce	eptable.				
Acknowledgement is made of a claim for foreign priority u	under 35 U.S.C. § 119(a)-(d).				
☐ All ☐Some* ☐None of the CERTIFIED copies of		1			
received.					
☐ received in Application No. (Series Code/Serial Nu	mber)				
$\hfill \square$ received in this national stage application from the	International Bureau (PCT Rule 1	7.2(a)).			
*Certified copies not received:					
☐ Acknowledgement is made of a claim for domestic priority	y under 35 U.S.C. § 119(e).				
A SHORTENED STATUTORY PERIOD FOR RESPONSE to THREE MONTHSTOM THE "DATE MAILED" of this Office at ABANDONMENT of this application. Extensions of time may	ction. Failure to timely comply will	result in			
Note the attached EXAMINER'S AMENDMENT or NOTIC the oath or declaration is deficient. A SUBSTITUTE OAT	E OF INFORMAL APPLICATION, H OR DECLARATION IS REQUIR	PTO-152, which discloses that ED.			
<ul> <li>because the originally filed drawings were declared by</li> </ul>	applicant to be informal.				
including changes required by the Notice of Draftspers Paper No2 .	son's Patent Drawing Review, PTC	D-948, attached hereto or to			
including changes required by the proposed drawing c approved by the examiner.	correction filed on	, which has been			
☐ including changes required by the attached Examiner's	s Amendment/Comment.				
Identifying indicia such as the application number (se the drawings. The drawings should be filed as a sepa Draftsperson.					
☐ Note the attached Examiner's comment regarding REQUI	REMENT FOR THE DEPOSIT OF	BIOLOGICAL MATERIAL.			
Any response to this letter should include, in the upper right to CODE/SERIAL NUMBER). If applicant has received a Notice and DATE of the NOTICE OF ALLOWANCE should also be in	of Allowance and Issue Fee Due	IUMBER (SERIES , the ISSUE BATCH NUMBER			
Attachment(s)					
Notice of References Cited, PTO-892					
☐ Information Disclosure Statement(s), PTO-1449, Pape					
Notice of Draftsperson's Patent Drawing Review, PTO	-948				
Notice of Informal Patent Application, PTO-152					
<ul><li>☐ Interview Summary, PTO-413</li><li>☐ Examiner's Amendment/Comment</li></ul>					
Examiner's Amendment Comment     Examiner's Comment Regarding Requirement for Dep	osit of Biological Material				
Examiner's Comment Regarding Requirement for Bop      Examiner's Statement of Reasons for Allowance	give:e.e.				

Application/Control Number: 09/441619

Art Unit:

### DETAILED ACTION

## Reasons for Allowance

- 1. 1-20 are allowed.
- and 11, the closest prior art of record, Figure 1 or Figure 2 discloses a switching amplifier comprising a first switch (mp1), a second switch (mn1), a third switch (mp2), a fourth switch (mn2) wherein each transistor having a respective control terminal (gate of each respective transistor), a first output terminal (OUTP) which is disposed between the first switch (mp1) and the second switch (mn1), and a second output terminal (OUTN) which is disposed between the third switch (mp2) and the fourth switch (mn2). As described above, Figure 1 or Figure 2 discloses all the limitations in the claims except for that the control circuit coupled to the four switches such that no voltage differential is generated between the first output terminal (OUTP) and the second output terminal (OUTN) in a first state of operation (Figure 5 or Figure 6 of drawing describes the first state of operation). This unique functional limitation is not taught or suggested by prior art or in combination of other references.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit:

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent numbers (6,028,476; 6,034,565; 6,016,075; 4,554,512; 4,673,889) are the switching amplifiers.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Choe whose telephone number is (703) 305-0576.

Art Unit:

H C #266

October 23, 2000

Robert PayJal

Supervicory Patent Examinar Technology Center 2800



# UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NUMBER FILING/RECEIPT DATE FIRST NAMED APPLICANT ATTORNEY DOCKET NO /TITLE Chen TI-29646

**Application Number:** 

Attachment to Paper Number:

		NOTICE OF INFORMAL APPLICATION				
Th	is a rioc	application is considered to be informal since it does not comply with the regulations for the reason(s) indicated below. The is within which to correct the informalities noted below and avoid abandonment is set in the accompanying Office action.				
A.	A new oath or declaration, identifying this application by the application number is required. The oath or declaration does not comply with 37 CFR 1.63 in that it:					
	2. 3. 4. 5. 6.	does not identify the residence (e.g., city and either state or foreign country) of each inventor.  does not identify each inventor by full name, including the family name and at least one given name without abbreviation.  does not identify the complete post office address of each inventor.  does not identify the citizenship of each inventor.  does not state whether the inventor is a sole or joint inventor.  does not state that the person making the oath or declaration:  has reviewed and understands the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration.				
		believes the named inventor or inventors to be the original and the first inventor or inventors of the subject matter which is claimed and for which a patent is sought.  acknowledges the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.  does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying				
		the application number, country, day, month, and year of its filing.  does not state that the person making the oath or declaration acknowledges the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application which discloses and claims subject matter in addition to that disclosed in the prior application (37 CFR 1.63(e)).  contains non-initialed alterations (37 CFR 1.52(c)).				
В. А	/bt	plicant is required to provide:				
	1. 2.	Proof of authority of the legal representative under 37 CFR 1.44.  An abstract in compliance with 37 CFR 1.72(b).				
C.		OTHER:				